

## **Error-Oriented Motivation of Turkish Students During their Adaptation to a Foreign University**

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### **Abstract**

The article deals with the problem of error-oriented motivation of Turkish students during the adaptation process to a foreign university (on an example of a Ukrainian university). Research was conducted on two samples of first year students: 45 Turkish and 61 Ukrainian students. An error-oriented motivation questionnaire and survey were used to identify strategies for student response to mistakes and the main problems of adaptation. It was determined that Turkish students are more likely to use a Learning from mistakes strategy and are more exposed to such adaptation problems as communication problems with the administration, difficulties in adapting to the new social environment, and emotional problems.

**Key words:** *error-oriented motivation, students, adaptation, perfectionism, professional development, foreign students.*

### **Introduction**

The process of the adaptation of first-year students to a university can be extremely difficult and associated with some negative experiences (Tarasova et al., 2017), stress (Clinciu, 2013) and emotional instability (Serebryakova et al., 2016). Any negative experience of adaptation to university can eventually lead to disappointment in life choice, profession and to the search for some social isolation (Ahmad, 2017). The period of adaptation to university is especially difficult for

foreign students, who have not only to adapt to the new rules of study, but also to go through the process of adaptation to new socio-cultural conditions (Layton et al., 2019; Jamaludin, 2018).

The opening of a large number of English-language programs in Eastern Europe countries led to the fact that a large number of students from Turkey went to study in Poland, the Czech Republic, Slovakia and Ukraine without any prior language training or cultural adaptation. Often students go to university for classes in the first week after arriving in a country which is new for them. Thus, they encounter a number of obstacles with finding housing, with orientation in an unfamiliar city and at the same time they have to familiarize themselves with the rules of study at the university and adapt to them.

One of the most important factors in adapting to a new environment is a healthy attitude to your own mistakes (Keith & Frese, 2008; Van Dyck, 2009; Catino & Pariotta, 2013). If a student is overly anxious about the possibility of making a mistake, he/she will close himself/herself off from the new experience and will follow a pattern of learned behaviour that is not always effective in a new socio-cultural space. This is most often associated with an increased level of perfectionism that blocks normal adaptation. If the student focuses solely on building an ideal image of himself/herself and directs all their energy to hiding the mistakes they make, then his/her real development and the adaptation process will be inhibited. But if the student is open to any negative experience of making mistakes and is ready to learn from them, then the process of his/her adaptation will be as productive as possible (Rybowiak et al., 1999).

It was understanding of the importance of the strategy of response to mistakes that determined the goal of the research: to study connections between the problems of adaptation to the conditions of a foreign university and strategies for responding to the mistakes of the Turkish students.

## **Methodology**

The research was conducted during October-November 2019 at the National Technical University “Kharkiv Polytechnic Institute” (Ukraine). For conducting the research two samples, consisting of first-year students, who were undergoing the process of adaptation to the university, were formed. The first sample consisted of 45 Turkish students (14 women and 31 men), with an average age of  $20.6 \pm 3.2$  years old. None of the Turkish students who took part in the research, attended any additional courses and went to Ukraine for the first time in August-September

2019. The second sample (comparison sample) consisted of 61 Ukrainian first-year students (21 women and 40 men), with an average age of  $19.7 \pm 1.7$  years old. Both samples were formed by simple random selection from the total number of the students of the general population.

At the first stage of the research the students were asked to rate the relevance of one of 7 problems of adaptation to the university according to a 10-point Likert scale: communication problems with teachers, communication problems with their groupmates, communication problems with the administration, difficulties in adapting to the new social environment, difficulties in adapting to the academic environment, schedule conflicts, emotional problems. After the survey, the overall indicator of the problems in the adaptation process (the arithmetic average of all the scales) was calculated based on the results of the evaluation of all the scales.

At the second stage of the research the Error Oriented Motivation Scale (EOMS) questionnaire was used. The EOMS questionnaire, adapted for the Turkish students by Ö. Çikrikci et al. (Çikrikci et al., 2014), was used for the survey of the Turkish students. But for the survey of the Ukrainian students the same EOMS questionnaire, adapted by N. Pidbutska & A. Knysh for Ukrainian sample (Pidbutska & Knysh, 2020), was used.

For statistical data processing descriptive statistics (percentages, mean, standard deviation) and the parametric mathematical statistics (T-test, Pearson correlation coefficient) were used. The statistical calculations were performed with the use of the SPSS 21.0 program.

## **Research results**

During the research, the results obtained in the group of Ukrainian students and in that of Turkish students were analyzed and compared. At the first stage of work with the data, the results of the students' survey regarding the problems that they most often face in the process of adapting to the university conditions, were analyzed (Table 1).

When assessing communication problems with teachers, both Turkish and Ukrainian students showed an average level. There were no statistically significant differences ( $T=0.11$ ,  $p>0.05$ ). At the same time, during an interview after the survey, the Ukrainian students noted that in comparison with high school, they feel some lack of attention and individual approach, that they do not always have enough time to write notes in lectures, do not understand some complex concepts and are afraid to ask for clarification of information needed. The Turkish

**Table 1.** The results of the students' survey regarding problems in the process of adapting to the university

Problems in the process of adapting to the University	M±σ		T-test
	Turkish students	Ukrainian students	
Communication problems with teachers	5.1±1.8	5.4±2.1	0.11
Communication problems with groupmates	6.3±1.1	7.2±3.2	0.27
Communication problems with the administration	7.4±0.9	4.3±0.7	2.72**
Difficulties in adapting to the new social environment	9.4±1.7	4.8±0.6	2.55*
Difficulties in adapting to the academic environment	5.2±1.5	4.9±1.7	0.13
Schedule conflicts	4.8±1.9	6.1±2.7	0.39
Emotional problems	7.9±0.9	4.8±1.2	2.07*
Overall indicator	6.5±2.1	5.4±2.1	0.37

Note: \* -  $p \leq 0.05$  \*\* -  $p \leq 0.01$  – a measure of statistical significance

students mainly focused on the language barrier: sometimes it is difficult for them to understand some individual words due to pronunciation issues, which leads to the distortion of the meaning of the material.

In comparison with the Turkish students, the Ukrainian students showed slightly greater concern about communication problems with their groupmates, but no statistically significant differences were noted in the results ( $T=0.27$ ,  $p>0.05$ ). The Ukrainian students insisted that most of the communication problems related to the need to adapt to their groupmates, whose personal traits are not always pleasant or understandable to them. Besides this, they also felt some lack of the friendly atmosphere they were used to at school. The Turkish students, on the other hand, saw their classmates as a kind of support and a reminder of home. In the conditions of group interaction, it is much easier for them to adapt to the realities of the university and the new country.

When evaluating communication problems with the administration, significant differences were identified ( $T=2.72$ ,  $p \leq 0.01$ ). The Ukrainian students have almost no problems communicating with the heads of the departments, deans or any other representatives of the university. They can learn all necessary information about the educational process from open sources on the Internet and do not need to communicate directly with the administration. The Turkish students often face the fact that it is impossible to find any up-to-date information in English about

changes in the educational process and representatives of the administration rarely communicate with them directly.

Significant differences also appeared in assessing problems in adapting to the new social environment ( $T=2.55, p \leq 0.05$ ). Among the Ukrainian students this problem is experienced only by those students who came from other cities and have to adapt to the conditions of life in a hostel and to coping with living independently. But Turkish students experience this problem much more acutely, because they have to adapt to the conditions of a new country and to learn to overcome the language barrier outside the university.

The students in both the research groups rated the significance of problems related to adaptation to the academic environment rather low, and no significant differences were identified ( $T=0.13, p > 0.05$ ). The absence of constant homework or strict control, the fact that lectures were in large auditoriums and there was freedom to express one's own opinions make the academic environment even more attractive than the high school environment.

No significant differences were noted in the estimation of schedule conflicts ( $T=0.39, p > 0.05$ ). However, the Ukrainian students are a little more concerned about these issues, because some of the students need to combine their studies and work and the inability to influence their own schedule causes them frustration.

The Turkish students are significantly more likely to experience emotional problems associated with the adaptation process ( $T=2.07, p \leq 0.05$ ) than the Ukrainian students. They note that they acutely suffer from the distance from home and family, feel loneliness more deeply and need some close emotional contact.

No significant differences were noted in the overall indicator of problems in adapting to university ( $T=0.27, p > 0.05$ ). Therefore, despite significant differences in the perception of various aspects of the process of adaptation to a higher educational establishment, representatives of both study groups face an equally moderate level of difficulty.

The results of the Error-Oriented Motivation Scale were analyzed in terms of the average values on the scales (Table 2) and in terms of the most common reactions to a mistake (Table 3).

According to the Learning from the Mistakes scale, the students in both groups showed an average level, with a tendency to move to a higher level, although no significant differences were noted ( $T=0.38, p > 0.05$ ). This strategy of responding to a mistake is the most constructive and is inherent in those students who have high self-esteem and are able to reflect. For them any mistakes are sources of experience and development.

**Table 2.** The results of a student survey regarding their attitude to mistakes

Scale	M±σ		T-test
	Turkish students	Ukrainian students	
Learning from Mistakes	29.3±4.4	27.1±3.8	0.38
Worrying about Mistakes	11.5±2.3	18.9±2.2	2.33*
Hiding Mistakes	22.7±3.1	25.4±4.2	0.52

Note: \* –  $p \leq 0,05$  – a measure of statistical significance

According to the Worrying about Mistakes scale, the Turkish students showed a low level tendency, while the Ukrainian students showed an average level. The differences in the results appeared to be statistically significant ( $T=2.33$ ,  $p \leq 0.05$ ). The Ukrainian students are more concerned about the possibility of making a mistake, which leads to excessive caution and a blocking of creativity. And as for the Turkish students, they feel more freedom of expression and do not avoid mistakes in their academic or social lives.

According to the Hiding Mistakes scale, the Turkish students demonstrated an average level, while the Ukrainian students demonstrated a high level. However, no statistically significant differences were noted. Thus, the Ukrainian students appeared to be slightly more prone to hiding their mistakes. This strategy is not constructive, because when a person often hides mistakes from others, they begin to deny the mistakes to themselves, without learning any lessons or new experience from them.

**Table 3.** The most common reactions to a mistake in the study groups

Scale	Turkish students	Ukrainian students
Learning from Mistakes	46.67%	36.07%
Worrying about Mistakes	26.67%	27.87%
Hiding Mistakes	26.67%	36.07%

When analyzing the most common strategies to reactions to a mistake in the study groups, it was determined that almost half of the Turkish students (46.67%) choose the Learning from Mistakes strategy. They simply have to use this strategy actively because social and educational life requires them to adapt to the new

cultural, social and educational environment and therefore, without perceiving their own mistakes, they simply will not be able to complete the process of adaptation. Less common appeared to be the Worrying about Mistakes and the Hiding Mistakes strategies (26.67% each). These strategies may be of low prevalence due to the awareness of the inevitability of mistakes in the process of adaptation to a new socio-cultural environment, as well as to the absence of a number of close relatives whose assessment could be important for the Turkish students.

The Learning from Mistakes and the Hiding Mistakes strategies are equally common among the Ukrainian students (36.07% each). Least common is the Worrying about Mistakes strategy (27.87%). It can be assumed that the Ukrainian students are also well aware of the importance of learning from their own mistakes, but at the same time they live in their usual environment and feel the need to hide their mistakes from their close relatives and friends in order to form a more positive image of themselves in their own eyes and in the eyes of the others.

The results of the search for correlations between the perception of the problems of adaptation to studying at the university and the strategies of reaction to mistakes are presented separately for the Turkish (Table 4) and the Ukrainian (Table 5) students.

**Table 4.** The correlation matrix of the attitude towards mistakes and the problems in adaptation to the conditions of the university for Turkish students

Indicator	Learning from Mistakes	Worrying about Mistakes	Hiding Mistakes
Communication problems with teachers	0.101	0.511**	0.632**
Communication problems with groupmates	0.217	0.726**	0.207
Communication problems with the administration	0.865**	0.623**	0.198
Problems in adapting to the new social environment	0.344*	0.754**	0.241
Difficulties in adapting to the academic environment	0.208	0.344*	0.175
Schedule conflicts	0.191	0.292*	0.111
Emotional problems	0.189	0.614**	0.294*
Overall indicator	0.264	0.544**	0.387*

Note: \* –  $p \leq 0.05$ , \*\* –  $p \leq 0.01$  – a measure of statistical significance

The correlation analysis allowed us to determine that the Learning from Mistakes strategy correlates significantly with communication problems with

the administration ( $r=0.865$ ,  $p\leq 0.01$ ) and problems in adapting to the new social environment ( $r=0.344$ ,  $p\leq 0.05$ ). Students who tend to learn from mistakes can be very attentive to both their own mistakes and those of others. In cases where such students face some misunderstandings and mistakes in the schedule, they seek to solve them, seeking help from the representatives of the administration, which is not adequately available due to bureaucratic obstacles. Thus, the connection between Learning from Mistakes and communication problems with the administration may be associated with the great desire of such students to actively find a solution to their problems, which will inevitably lead to some problems in finding a common point of view with the administration. The connection between Learning from Mistakes and problems in adapting to the new social environment can be explained by the fact that these are social difficulties which make the Turkish students think more about the mistakes they made and learn from them. Thus, social difficulties can act as a factor in the development of a more conscious attitude to mistakes in one's own social and educational behavior.

The Worrying about Mistakes strategy is correlated significantly with all the problems of adaptation to studying at university: issues in communication with teachers ( $r=0.511$ ,  $p\leq 0.01$ ), issues in communication with groupmates ( $r=0.726$ ,  $p\leq 0.01$ ), issues in communication with the administration ( $r=0.623$ ,  $p\leq 0.01$ ), difficulties in adapting to a new social environment ( $r=0.754$ ,  $p\leq 0.01$ ), difficulties in adapting to the academic environment ( $r=0.344$ ,  $p\leq 0.05$ ), schedule conflicts ( $r=0.292$ ,  $p\leq 0.05$ ), and emotional problems ( $r=0.614$ ,  $p\leq 0.01$ ), and with the overall indicator of problems in the process of adaptation ( $r=0.544$ ,  $p\leq 0.01$ ). The given strategy is associated with a general lack of confidence in one's own abilities, the search for an easy way, and the desire to hide from mistakes. Since it is impossible to hide from mistakes in the process of adapting to a new educational and socio-cultural environment, the students who are prone to Worrying about Mistakes will experience all their failures and mistakes more acutely and will evaluate them as more significant than students who do not use this strategy of reacting to a mistake. An excessive Worrying about Mistakes can lead to an increased level of anxiety, insecurity and a drop in self-esteem, so it is extremely important to help and support the students who are prone to use this strategy.

The Hiding Mistakes strategy correlates significantly with communication problems with teachers ( $r=0.632$ ,  $p\leq 0.01$ ), emotional problems ( $r=0.294$ ,  $p\leq 0.05$ ) and with the overall indicator of problems in the adaptation process ( $r=0.387$ ,  $p\leq 0.05$ ). This strategy is most often used by the students who combine a high propensity for perfectionism and low self-esteem. They are acutely worried about their inability to hide their mistakes from their teachers and because of this they face some deep

emotional problems. The constant obsession with hiding your own mistakes from others, combined with ignoring useful new experiences, creates a vicious circle, where each subsequent mistake leads not to productive correction of behavior, but to ignoring the problems, which generates even more new mistakes.

**Table 5.** The correlation matrix of the attitude towards mistakes and problems in adaptation to the conditions of the university for Ukrainian students.

Indicator	Learning from Mistakes	Worrying about Mistakes	Hiding Mistakes
Communication problems with teachers	0.099	0.312*	0.341**
Communication problems with groupmates	0.114	0.294*	0.428**
Communication problems with the administration	0.203	0.127	0.087
Problems in adapting to the new social environment	0.243	0.164	0.432**
Difficulties in adapting to the academic environment	0.104	0.233	0.321*
Schedule conflicts	0.184	0.183	0.115
Emotional problems	0.215	0.425**	0.353**
Overall indicator	0.164	0.351**	0.297*

Note: \* –  $p \leq 0.05$  \*\* –  $p \leq 0.01$  – a measure of statistical significance

When analyzing the correlations, in the group of Ukrainian students no significant connections were found between the Learning from Mistakes strategy and problems that arise in the process of adapting to the university. The Ukrainian students who use this strategy can more easily tolerate the process of adaptation and none of its aspects leads to any social or psychological discomfort.

Some statistically significant correlations were determined between worrying about Mistakes and communication problems with teachers ( $r=0.312$ ,  $p \leq 0.05$ ), communication problems with groupmates ( $r=0.294$ ,  $p \leq 0.05$ ), emotional problems ( $r=0.425$ ,  $p \leq 0.01$ ) and with the overall indicator of problems in the adaptation process ( $r=0.351$ ,  $p \leq 0.01$ ). A constant preoccupation with mistakes leads to overly passive behavior: the student prefers silence and avoidance over the possibility of self-expression. As a result, he/she will constantly face misunderstandings on the part of teachers, and groupmates and will experience deep emotional discomfort.

The Hiding Mistakes strategy significantly correlates with communication problems with teachers ( $r=0.341$ ,  $p \leq 0.01$ ), communication problems with groupmates ( $r=0.428$ ,  $p \leq 0.01$ ), difficulties in adapting to the new social environment ( $r=0.432$ ,  $p \leq 0.01$ ), difficulties in adapting to the academic environment ( $r=0.321$ ,  $p \leq 0.05$ ),

emotional problems ( $r=0.353$ ,  $p\leq 0.01$ ) and with the overall indicator of problems in the adaptation process ( $r=0.297$ ,  $p\leq 0.05$ ). The tendency to hide mistakes leads to some tension in relationships with others, because it is necessary to constantly hide mistakes from them. All this results in some serious emotional experiences and an increase in the overall level of problems in adaptation to the university.

## **Discussion**

During the research it was found that in any situations connected with mistakes, the Turkish students tend to use the Learning from Mistakes strategy ( $29.3 \pm 4.4$ ), slightly less frequently the Hiding Mistakes strategy ( $22.7 \pm 3.1$ ) and least frequently the Worrying about Mistakes strategy ( $11.5 \pm 2.3$ ). When adapting the EOMS questionnaire to Turkish students who study in their home country, Ö. Çikrikci found average indicators for the Learn from Mistakes strategy –  $28.03 \pm 4.11$ , for the Worry about Mistakes strategy –  $20.09 \pm 4.96$  and for the Hiding the Mistakes strategy –  $16.84 \pm 4.83$  – (Çikrikci et al., 2014). Thus, in comparison with students who study in Turkey, the students who go through the adaptation to the conditions of the Ukrainian University, have an increased tendency to Hide Mistakes and a reduced tendency to Worry about Mistakes. Such differences in results can be explained by the fact that some mistakes in communication and social behavior are inevitable in the process of adapting to a new country, and realizing this, the majority of the Turkish students decide to learn from mistakes and thus adapt to the new conditions and grow professionally and personally.

The positive correlation found between Learning from Mistakes and communication problems with the administration and problems in adjusting to the new social environment, emphasizes the proactive adaptive position of the students, who choose this strategy of reaction to mistakes. Similar results were shown by M. Catino and G. Patriotta (2013), who showed that Learning from Mistakes leads to higher indicators of cognitive and behavioral performance, as well as to emotional calmness and satisfaction with one's own activities.

Significant correlations of Worrying about Mistakes with all the problems of adaptation indicate that this strategy creates some internal personal barriers in the process of adaptation, blocking creativity, self-expression and leading to some internal and external conflicts and misunderstandings. These findings are supported by some earlier research by K. Schell, who demonstrated that using this strategy does not contribute to the normal development of the individual and inhibits this individual's ability to learn (Schell, 2012).

Significant correlations between Hiding Mistakes and communication problems with teachers and emotional problems indicate that this strategy negatively affects the student's perception of himself/herself in the new learning environment and pushes him/her to use "ostentatious perfectionism", which is to reject the valuable experience that can be had from mistakes and to build an idealized image of himself/herself in the eyes of others. Such behavior leads to some emotional discomfort, because the student who resorts to such actions knows deep down that he/she is deceiving others. V. Rybowski's research shows that the overuse of this strategy leads to a deep self-rejection and to emotional problems (Rybowski et al., 1999).

The results obtained show that error oriented motivation is an extremely important indicator that can have a serious impact on the process of adaptation of Turkish students to the conditions of a foreign university. Some purposeful programs for the development of a healthy attitude to mistakes would greatly facilitate the adaptation process, would increase the students' self-esteem and productivity. That is why we believe that the development of some training programs in this direction is an extremely relevant area of research for teachers and psychologists, engaged in the adaptation of foreign students.

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